

Climbing Drum Peel Fixture for Adhesive Bonds

Built to ASTM D1781 — Standard Test Method for Climbing Drum Peel for Adhesives



OVERVIEW

Climbing drum peel fixture for measuring the peel resistance of a thin, flexible facing bonded to a rigid or flanged adherend. Straps wrap around a flanged drum so that, as the machine pulls, the drum rolls up the specimen and peels the facing at a controlled radius, producing a peel torque value for the bond.

KEY FEATURES

- Flanged peel drum with loading straps per climbing drum principle
- Drum climbs specimen for a constant peel radius throughout the test
- Lower clamp grips the rigid adherend or sandwich panel securely
- Balanced, low-friction design simplifies tare-load correction
- Supplied with adapters to suit your load frame (clevis or threaded)

TECHNICAL SPECIFICATIONS

Test method	Climbing drum peel
Test type / loading	Tension via straps wound on flanged drum
Specimens	Flexible facing bonded to rigid adherend or sandwich core, per ASTM D1781
Load capacity	5 kN standard; higher capacities on request
Fixture material	Aluminum drum, steel clamps and straps, corrosion-resistant finish
Gripping surfaces	Serrated clamp faces for the rigid adherend
Machine connection	Clevis pin or threaded adapter, to suit customer frame
Compatible frames	Electromechanical and servo-hydraulic universal test machines

APPLICATIONS

- Honeycomb sandwich facing-to-core bonds
- Metal-to-metal skin bonds
- Aerospace structural adhesive qualification
- Bonding process quality control

ABOUT THE STANDARD

ASTM D1781 determines the peel resistance of adhesive bonds between a relatively flexible adherend and a rigid adherend, and of sandwich facings to core. A flanged drum climbs the specimen as loading straps unwind, peeling the facing around the drum radius. Peel torque is calculated from the peeling load minus the load needed to raise the drum alone.

Ordering & customization: Specify specimen width and thickness, facing material, required capacity and test machine connection when ordering. Custom drum sizes available.

Specifications are typical and may vary by configuration; confirm at time of quote. Users should refer to the current edition of the standard for test procedures. Part ref. UGC-D1781-PF